## DEPARTMENT OF ENVIRONMENTAL QUALITY PROPOSED ALTERNATIVE MERCURY RULE 9/13/2006

## <u>17.8.740 DEFINITIONS</u> For the purposes of this subchapter:

- (1) "Alternative mercury emission limit" means a mercury emission limit for a mercury-emitting generating unit, established by the department in a Montana air quality permit issued or modified pursuant to 75-2-211, MCA, in lieu of compliance with [NEW RULE I(1)(a)].
  - (1) remains the same, but is renumbered (2).
- (3) "Commencement of commercial operation" has the meaning of "commence commercial operation" as defined in 40 CFR 60.4102.
  - (2) through (7) remain the same, but are renumbered (4) through (9).
- (10) "Maximum design heat input" has the meaning as defined in 40 CFR 60.4102.
- (11) "Mercury" means mercury or mercury compounds in either a gaseous or particulate form.
- (12) "Mercury-emitting generating unit" means any emitting unit at a facility for which an air quality permit is required pursuant to 75-2-211 or 75-2-217, MCA, that generates electricity and combusts coal, coal refuse, or a synthetic gas derived from coal and that is defined as an electrical generating unit under 40 CFR 60.24.
- (13) "Mercury-emitting generating unit that combusts lignite" means any mercury-emitting generating unit that combusts lignite in an amount equal to or greater than 75% of its total heat input, calculated for the prior calendar year on a calendar year basis.
- (8) through (15)(b) remain the same, but are renumbered (14) through (21)(b).
- <u>17.8.767 INCORPORATION BY REFERENCE</u> (1) For the purposes of this subchapter, the board hereby adopts and incorporates by reference:
  - (a) through (c) remain the same.
- (d) 40 CFR Part 60, specifying standards of performance for new stationary sources, except for 40 CFR 60.4141-4142;
  - (e) through (g) remain the same.
  - (2) through (4) remain the same.

## RULE I MERCURY EMISSION STANDARDS FOR MERCURY-EMITTING GENERATING UNITS (1) Except as provided in (3) through (7), the owner or operator of a mercury-emitting generating unit shall:

- (a) if obtaining a Montana Air Quality Permit pursuant to ARM 17.8.743, install Best Available Control Technology for control of mercury emissions as required by 17.8.752;
- (b) beginning January 1, 2010, or at commencement of commercial operation, whichever is later, limit mercury emissions from the mercury-emitting generating unit to an emission rate equal to or less than 0.9 pounds of mercury per trillion Btu, calculated as a rolling 12-month average, for all mercury-emitting

generating units;

- (c) submit an application to the department for a Montana air quality permit or modification of an existing Montana air quality permit for the mercury-emitting generating unit solely to establish the mercury emission limit from (1)(b) and any necessary operational requirements as a condition of the permit. The owner or operator shall include an analysis of the facility's mercury emission control plan in the application and shall submit the application to the department by January 1, 2009, or 12 months prior to commencement of commercial operation, whichever is later;
- (d) by January 1, 2010, or at commencement of commercial operation, whichever is later, operate equipment that is projected, as determined by the department, to meet the mercury emission limit in (1)(b).
- (e) if more than one mercury-emitting generating unit is located at a facility, the owner or operator may demonstrate compliance with the requirements of (1)(b), an alternative emission limit or a revised alternative emission limit on a facility-wide basis. An owner or operator choosing to demonstrate compliance with this rule on a facility-wide basis shall report the information required in (9) on a facility-wide basis.
- (2) If the owner or operator of a mercury-emitting generating unit properly installs and operates control technology or boiler technology, or follows practices projected to meet the mercury emission limit in (1)(b), and the control technology, boiler technology, or practices fail to meet the emission rate required in (1)(b), the owner or operator:
- (a) shall notify the department of the failure to meet the emission rate required in (1)(b) by March 1, 2011, or within 2 months of such failure, whichever is later; and
- (b) shall submit an application with the department for a Montana air quality permit or a modification of a Montana air quality permit solely to establish an alternative mercury emission limit. The owner or operator shall file the application by July 1, 2011, or within 6 months of the failure to meet the emission rate required in (1)(b), whichever is later, and shall include all monitoring data, obtained pursuant to (9), for the mercury-emitting generating unit.
- (c) If such an application is submitted, the failure of the owner or operator of the mercury-emitting generating unit to comply with the mercury emission limit in (1)(b) is not a violation of this rule or the permit.
- (3) The department may establish an alternative mercury emission limit only if the owner or operator applies for, or has applied for, a permit under 75-2-211, MCA, that requires boiler technology, mercury-specific control technology, or mercury-specific control practices that the department determines constitutes a continual program of mercury emission control progression able to achieve the mercury emission rate requirement of (1)(b).
- (4) An alternative mercury emission limit established in a Montana air quality permit:
  - (a) must not exceed:
- (i) 4.8 pounds of mercury per trillion Btu, calculated as a rolling 12-month average, for a mercury-emitting generating unit that combusts lignite and commenced commercial operation prior to October 1, 2006;

- (ii) 3.6 pounds of mercury per trillion Btu, calculated as a rolling 12-month average, for a mercury-emitting generating unit that combusts lignite and for which an application for a Montana air quality permit is filed with the department prior to January 1, 2009;
- (iii) 2.16 pounds of mercury per trillion Btu, calculated as a rolling 12-month average, for a mercury-emitting generating unit that combusts lignite and for which an application for a Montana air quality permit is filed with the department after January 1, 2009;
- (iv) 2.4 pounds of mercury per trillion Btu, calculated as a rolling 12-month average, for a mercury-emitting generating unit that does not combust lignite and commenced commercial operation prior to October 1, 2006; or
- (v) 1.5 pounds of mercury per trillion Btu, calculated as a rolling 12-month average, for all other mercury-emitting generating units that do not combust lignite, and
  - (b) expires January 1, 2018.
- (5) The owner or operator of a mercury-emitting generating unit, for which the department has established an alternative mercury emission limit, shall submit an application with the department for a Montana air quality permit or a modification of a Montana air quality permit for the mercury-emitting generating unit to establish a revised alternative mercury emission limit by January 1, 2014. The owner or operator shall submit, as part of the application, a Best Available Control Technology analysis for the control of mercury emissions and a review of the mercury-emitting generating unit's existing alternative mercury emission limit and program of mercury control, including associated data.
- (6) The department shall establish a revised alternative mercury emission limit in a Montana air quality permit consistent with Best Available Control Technology. This revised alternative mercury emission limit is effective beginning January 1, 2018.
- (7) The owner or operator of a mercury-emitting generating unit, for which the department has established a mercury emission limit under (1)(b) or (6), shall file an application with the department for a Montana air quality permit or a modification of a Montana air quality permit for the mercury-emitting generating unit to establish a revised mercury emission limit no later than 10 years after issuance of the permit containing the mercury emission limit. The owner or operator shall submit a Best Available Control Technology analysis as part of the application. The department shall establish a revised mercury emission limit in a Montana air quality permit consistent with Best Available Control Technology.
- (8) The owner or operator of a mercury-emitting generating unit shall comply with the monitoring, recordkeeping, and reporting provisions of 40 CFR Part 75. Any continuous emissions monitors used must be operated in compliance with 40 CFR Part 60, Appendix B.
- (9) The owner or operator of any mercury-emitting generating unit shall report to the department within 60 days after the end of each calendar quarter, on forms as may be prescribed by the department:
- (a) the monthly average mercury emission rate, for each month of the quarter; and

(b) the percentage of time the mercury emission monitoring method was operating during the quarter.

NEW RULE II MERCURY ALLOWANCE ALLOCATIONS UNDER CAP AND TRADE BUDGET (1) The department shall submit to EPA mercury allowance allocations as described below.

- (a) For mercury-emitting generating units for which commercial operation commenced before January 1, 2001, the department shall submit allowance allocations by November 17, 2006, for the control period years of 2010, 2011, and 2012, and by October 31, 2009, and October 31 of each year thereafter for the fourth control period year after the year of the notification deadline in a format prescribed by EPA and in accordance with (2) and (3).
- (b) For mercury-emitting generating units for which commercial operation commenced after January 1, 2001, the department shall submit mercury allowance allocations by October 31 of the control period year for which the mercury allowances are allocated.
- (2) The department shall allocate mercury allowances to the owner or operator of a mercury-emitting generating unit holding a Montana air quality permit on the following basis:
- (a) For each control period beginning in 2010 and ending in 2017, mercury allowance allocations for mercury-emitting generating units are calculated as follows:
- (i) 24.0 ounces (equivalent to 1.5 pounds) per Trillion BTU multiplied by the maximum design heat input per year for each Montana mercury-emitting generating unit that combusts lignite; or
- (i) 14.4 ounces (equivalent to 0.9 pounds) per Trillion BTU multiplied by the maximum design heat input per year for each Montana mercury-emitting generating unit that does not combust lignite.
- (b) For each control period beginning in 2018, mercury allowance allocations for mercury-emitting generating units must be based on an emission rate calculated as follows: 4768 (298 pound mercury budget in ounces) divided by the sum of the maximum design heat inputs per year in Trillion BTU for each Montana mercury-emitting generating unit in commercial operation for the previous calendar year or that has submitted a request for mercury allowances under (c) for that control period year. The maximum design heat input per year for each Montana mercury-emitting generating unit shall be calculated by multiplying the maximum design heat input in Trillion BTU per hour by 8760 hours per year. The department shall determine maximum design heat input data for each mercury-emitting generating unit based on information reported to it by the owner or operator of the mercury-emitting generating unit.
- (c) The owner or operator of a mercury-emitting generating unit that commences commercial operation on or after September 15, 2006 may submit to the department a request to be allocated mercury allowances, starting with the later of the control period in 2010 or the first control period after the control period in which the mercury-emitting generating unit commences commercial operation. The mercury allowance allocation request must be submitted on or before July 1 of the first control period for which the mercury allowances are requested and after the date on which the mercury-emitting generating unit commences commercial

operation.

- (d) The department may not allocate mercury allowances in excess of the Montana mercury trading budget under 40 CFR §60.4140.
- (e) Any allowances left unallocated by the department shall be placed into a general account for the State of Montana as established under 40 CFR 60.4151.
- (4) Allocations for a particular control period are limited to those mercuryemitting generating units that were, or are anticipated to be, in commercial operation in the year for which the allocations are being made. Mercury allowance allocations for a partial year, or anticipated partial year, must be prorated.